

# VDURA for Energy

Accelerate energy exploration and production with faster data processing and enhanced operational efficiency.

## About us

VDURA elevates AI and HPC data storage and management with a powerful and flexible Data Platform that delivers an unparalleled blend of performance, durability, and simplicity.

## Customers



## Introduction

As energy companies race to supply increasing global demand, they face mounting pressure to meet critical sustainability initiatives. Addressing this dual challenge requires powerful high-performance computing (HPC), artificial intelligence, and machine learning (AI/ML) technologies.

VDURA partners with world-leading energy companies to streamline the acquisition, analysis, and production of resources. The VDURA Data Platform leverages over two decades of refinement to deliver the most stable high-performance environment for HPC and AI workloads in this sector.

## Get more from your data, sooner

Energy companies identify the best places to dig, drill, build, or store by collecting and analyzing massive volumes of data. They use modeling and simulation augmented by AI/ML techniques to help predict energy reserves and optimize designs for harnessing renewables. These processing and simulation activities can be time consuming, and storage access bottlenecks often slow time to results.

The VDURA Data Platform uses dynamic data acceleration to optimize energy HPC and AI/ML workloads by automatically and transparently placing data by type into the most efficient and cost-effective underlying storage media. Autotuning reduces runtime while an unmatched reliability architecture prevents unplanned downtime, so your applications stay running.

## Consolidate data for enhanced control, communication, and collaboration

Data silos pose a significant challenge for energy organizations. Having data in unconnected silos reduces visibility, degrades team efficiency, and prevents access to data that multiple applications could otherwise analyze. Siloed data can also result in incomplete datasets, inefficient processes, and security vulnerabilities.

The VDURA Data Platform eliminates horizontal silos, enabling smarter data consolidation with unlimited scale-out. Once consolidated, data becomes easier to manage and share between teams, without sacrificing performance. Additionally, our simple, intuitive interface and effortless scalability allow a single administrator with no specialty HPC knowledge to have full control over the entire data environment.

## Make data visible, actionable, and economical

Energy companies storing and managing huge data deposits need to know what data they have, where it is, and how much it is costing them to store it.

The VDURA Data Platform has insight tools that deliver comprehensive activity insights from a single dashboard for a holistic view of the storage environment. Users can search, analyze, and identify data to reduce storage costs by revealing cold and duplicated data. In conjunction with the VDURA Data Platform's data movement tools, data can then be seamlessly and securely moved between on-prem and cloud storage locations.

## Move large volumes of data easily and quickly

During data processing workflows – from collection to results – data often must be transferred or consolidated into large, less costly “parking lot” storage, moved between off-shore and on-shore sites, or to different data centers or cloud providers, sometimes across large geographical distances, and then ultimately transferred to a customer. The process can be complex and both time- and resource-intensive.

VDURA enables companies to easily and efficiently copy, move, and synchronize data between the VDURA Data Platform and AWS, Azure and Google Cloud object storage, and between the VDURA Data Platform and any S3 object store. The result is reduced data movement time, reduced complexity, and greater confidence that data has been moved successfully.

## Secure and protect data in a scalable, reliable storage environment

Energy data may reside in small files or petabyte-sized volumes. As storage can be tapped by thousands of nodes reading and writing data at the same time, companies must have reliable, readily available data, stored on premises and in the cloud.

The VDURA Data Platform's robust architecture supports high concurrency and vast data volumes without compromising on speed or reliability. Whether data is stored on-premises or in the cloud, VDURA ensures seamless integration and continuous availability, minimizing downtime and maximizing operational efficiency.